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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,054	01/31/2002	Dorin Panescu	267/107	3947

7590

05/07/2003

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EXAMINER

PEFFLEY, MICHAEL F

ART UNIT

PAPER NUMBER

3739

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,054

Applicant(s)

PANESCU, DORIN

Examiner

Michael Peffley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is unclear as to the scope of the claim. The preamble recites "A system for delivering power to a therapeutic device" which suggests that the system does not include the therapeutic device. However, the therapeutic is then positively recited in the body of the claim with the limitation "a feedback apparatus coupled to one or both of the patient cable and the therapeutic device". It is therefore unclear if the applicant is claiming the system, or the combination of the system and the therapeutic device. Subsequent dependent claims (i.e. claims 7-10) also positively recite the therapeutic device making it apparent that the combination of the system and the therapeutic are to be the scope of the invention. It is suggested that the preamble be amended to positively recite the therapeutic device (e.g. "A system including a therapeutic device").

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1-3, 7, 8, 11, 12, 14, 16-18, 21, 24, 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Strul et al ('681).

Strul et al discloses a system including an ablation catheter (12) and a means for controlling the delivery of energy to the RF electrodes of the catheter. The system includes a generator (18), a patient cable (22) connecting the catheter to the generator via connector (24). There is also a feedback apparatus (30) coupled to the therapeutic device. The feedback apparatus is a temperature sensor and senses a variable (i.e. temperature) which is dependent on the delivered power. A feedback signal from the feedback apparatus is used to control the output power of the generator. Wires (22b) provide the feedback path for transmitting the feedback signal back to the power generator in the form of an analog signal. The method of using the device is inherent to the structure and fully disclosed by Strul et al.

Claims 1-5, 11, 12, 14, 16-21, 24, 25 and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by Becker et al ('659).

Becker et al disclose a system which includes a generator (101) including a power regulation circuit (109) and patient cables connecting the generator to therapeutic electrodes (111). Also, there is a feedback apparatus connected to the patient cable (see Figure 1). The feedback apparatus is inductively coupled to the therapeutic electrodes (col. 5, lines 40-45) or may be connected in circuit to the electrodes and is used to sense voltage and current in order to control the delivery of power to the

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electrodes. A wire connects the feedback apparatus to the generator. The method of using the system is inherent to the structure and fully disclosed by Becker et al.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6, 15, 19, 20 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strul et al ('681) in view of the teaching of Becker et al ('659).

The Strul et al system has been addressed previously. In addition to the temperature sensors, Strul et al teach that the voltage, current and power may be monitored and that information used to control the output power of the generator (col. 2, line 65 to col. 3, line 5). However, Strul et al do not teach of providing the current/power/voltage sensor means located on the therapeutic device as set forth in the instant claims. Also, Strul et al fail to disclose the use of digital signals from the feedback apparatus (i.e. sensors).

Becker et al, as addressed previously, disclose a power/voltage/current measurement means which may be connected to the therapeutic device either inductively or by direct circuit. Such an arrangement allows for the measure of the voltage, current and power characteristics at the device. Further, Becker et al suggest that the components may be either digital or analog (Abstract) as is well known in the

art. It is the examiner's position that one of ordinary skill in the art would recognize the obvious substitutability of analog and digital sensors.

To have provided the Strul et al system with a voltage/current sensor feedback means connected to the therapeutic apparatus (i.e. catheter) in order to monitor the current, voltage and power characteristics at the device (rather than at the generator) would have been an obvious modification for one of ordinary skill in the art in view of the Becker et al teaching.

Claims 9, 10, 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strul et al ('681) in view of the teaching of Brucker et al ('012).

The Strul et al system has been previously addressed. Strul et al provide an RF ablation catheter for the treatment of tissue, and fail to disclose the use of alternate energy sources such as microwave and ultrasonic energy.

Brucker et al also disclose an ablation catheter system which includes an RF electrode means for treating tissue and a temperature feedback means to control power delivery. Also, Brucker et al teach that it is generally known to substitute other types of energy modalities, such as microwave and ultrasonic energy (col. 2, lines 50-56). The examiner maintains that the use of well-known alternative energy delivery means is generally known in the art as evidenced by Brucker et al.

To have provided the Strul et al system with any well-known alternative energy source, such as microwave and/or ultrasonic energy, would have been an obvious

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consideration for one of ordinary skill in the art, particularly since Brucker et al teach that these energy modalities are readily substitutable in ablation catheter systems.

Claims 13 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strul et al ('681) in view of the teaching of Ben-Haim ('493).

Strul et al fail to disclose the use of wireless sensors which transmit measured data to a central control without a hard-wired connection.

Ben-Haim disclose an endoscope system which employs a plurality of sensors for monitoring endoscope position. In particular, Ben-Haim teach that the sensors may be hard-wired to the control unit, or the sensors may be use wireless transmitters so as to take up less space in the device with sensor wires (col. 9, lines 45-50).

To have provided the Strul et al sensors with a wireless transmission means to send the sensed data to the controller while taking up less space with transmission wires would have been an obvious design consideration for one of ordinary skill in the art, particularly since Ben-Haim teach that wireless sensors may be advantageously employed to provide signals while taking up minimal space in a catheter-type device.

Conclusion

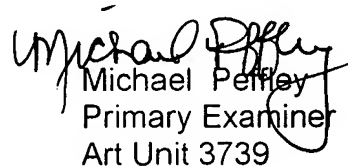
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ensslin ('658) and Estes ('126) disclose other known inductive sensors which are attached to patient leads for measuring current/voltage and controlling the output of a high frequency generator.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Peffley whose telephone number is (703) 308-4305. The examiner can normally be reached on Mon-Fri from 6am-3pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda Dvorak can be reached on (703) 308-0994. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


Michael Peffley
Primary Examiner
Art Unit 3739

mp
May 1, 2003